Case 2833

Tortaxis Pilsbry, 1906 and *Allopeas* Baker, 1935 (Mollusca, Gastropoda): proposed conservation by the designation of a neotype for *Achatina erecta* Benson, 1842

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Abstract. The purpose of this application is to conserve the usage of the subulinid land snail generic names *Tortaxis* Pilsbry, 1906 and *Allopeas* Baker, 1935, and that of the specific name of *Achatina erecta* Benson, 1842. When establishing *Tortaxis* Pilsbry designated *Achatina erecta* as the type species but he was accepting a misinterpretation of this species and in fact dealing with *Spiraxis mandarinus* Pfeiffer, 1855 (originally included as a nominal species but since synonymized with '*A. erecta*'). The syntypes of *Achatina erecta* Benson are specimens of *Bulimus gracilis* Hutton, 1834, the type species of *Allopeas*. It is proposed that usage be maintained by designating a neotype for *A. erecta* in the established sense.

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1. The subulinid land snail *Achatina erecta* Benson, 1842 (p. 487) was briefly described, without figures, from a collection made by T. Cantor in coastal areas of south-east China. Four specimens from the type series are held in the collections of the Zoological Survey of India, Calcutta (registration number M2262 4/4).

2. Reeve (1849, pl. 16, fig. 69) redescribed and figured '*Achatina erecta*' based on five rather bleached shells in the H. Cuming collection, collected by Largilliert from Nanking (Nan-ching), now in the collections of the Natural History Museum, London (registration number 1991104). *A. erecta* Benson has been accepted by all subsequent workers in the sense of Reeve (for example Pilsbry, 1906, pp. 7–8, pl. 2, figs. 24–26; Yen, 1939, p. 110, pl. 11, fig. 2; Brandt, 1980, p. 107).

3. *Tortaxis* Pilsbry, 1906 (p. 5) was established with the original designation of *A. erecta* Benson, 1842 as the type species. Pilsbry mentioned Reeve (1849) when citing *A. erecta* but did not recognise that the species dealt with by Benson and by Reeve were different, although he noted that Benson's description was 'very incomplete'.

4. Having examined the Calcutta type series of *Achatina erecta* Benson I have identified them as large individuals of *Bulimus gracilis* Hutton, 1834 (p. 93), a widespread synanthropic species, 11 syntypes of which are in the Natural History Museum, London (registration number 1856.9.15.68). *B. gracilis* is the type species of *Allopeas* Baker, 1935 (p. 84), published as a subgenus of *Lamellaxis* Strebel & Pfeffer, 1882 (p. 109) but which I consider should be given generic rank. The syntypes of *Achatina erecta* are in general agreement with Benson's description but differ in several respects from '*Achatina erecta*' as described and illustrated by Reeve (1849). Two very distinct species are represented; *A. erecta* sensu Reeve does not belong to *Lamellaxis* or to *Allopeas* but to *Tortaxis* as described by Pilsbry and as it has since been understood.

5. It is apparent that *Tortaxis* Pilsbry, 1906 was based upon a misidentified type species and the case is referred to the Commission under Article 70b of the Code. It also follows from para. 4 that under the provisions of the Code *Tortaxis* is a senior subjective synonym of *Allopeas* Baker, 1935, although such a synonymy does not result from Pilsbry's or any subsequent treatment of *Tortaxis*.

6. I consider *Spiraxis mandarina* (correctly *mandarinus*) Pfeiffer, 1855 (p. 9), one of the several nominal species originally placed in *Tortaxis*, to be synonymous with '*Achatina erecta*' sensu Reeve (1849) and later authors. Pfeiffer had noted that *S. mandarinus* was 'allied to *Achatina erecta*, Bens., which is also a *Spiraxis*'. Three syntypes of *S. mandarinus* are in the Natural History Museum, London (registration number 1987034, H. Cuming collection, locality 'China'); they are specimens of '*A. erecta* Benson' as used by and since Reeve (for example in references in para. 7 below). The name *mandarinus* has not been in recent use.

7. As *Tortaxis* Pilsbry and *Allopeas* Baker are well-established names it is desirable to conserve their current usage. Examples of the use of *Tortaxis* include Yen, 1939, 1942; Zilch, 1959, 1973; Brandt, 1980 and Chen & Gao, 1987. References to *Allopeas* include Pilsbry, 1943; Zilch, 1959, 1973; Marcus & Marcus, 1968; Mitra, Biswas & Rahman, 1976; Joo, Kwon & Habe, 1979; Brandt, 1980; Azuma, 1982; Hamada, 1983; Habe, 1985.

8. The type species of *Tortaxis* has always been given, correctly, as *Achatina erecta* Benson, 1842 but this name has been used in the taxonomic sense of *Spiraxis mandarinus* Pfeiffer, 1855, as mentioned in para. 6. The usages of *Tortaxis* Pilsbry, 1906, *T. erectus* (Benson, 1842) and *Allopeas* Baker, 1935 would all be conserved by the designation of one of the specimens of '*A. erecta*' seen by Reeve (1849) (see para. 2 above) as the neotype of *Achatina erecta* Benson, 1842. I propose that the specimen now labelled 1991104A (height 21.6 mm, width 6.8 mm and 7.4 whorls) be designated as the neotype of *A. erecta*.

9. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary powers to set aside all previous fixations of type specimens for the nominal species *Achatina erecta* Benson, 1842 and to designate as neotype the specimen 1991104A in the Natural History Museum, London, mentioned in paras. 2 and 8 above;

(2) to place on the Official List of Generic Names in Zoology the following names:
   (a) *Tortaxis* Pilsbry, 1906 (gender: masculine), type species by original designation *Achatina erecta* Benson, 1842;
   (b) *Allopeas* Baker, 1935 (gender: neuter), type species by original designation *Bulimus gracilis* Hutton, 1834;

(3) to place on the Official List of Specific Names in Zoology the following names:
   (a) *erecta* Benson, 1842, as published in the binomen *Achatina erecta* (specific name of the type species of *Tortaxis* Pilsbry, 1906), and as defined by the neotype designated in (1) above;
   (b) *gracilis* Hutton, 1834, as published in the binomen *Bulimus gracilis* (specific name of the type species of *Allopeas* Baker, 1935).

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